

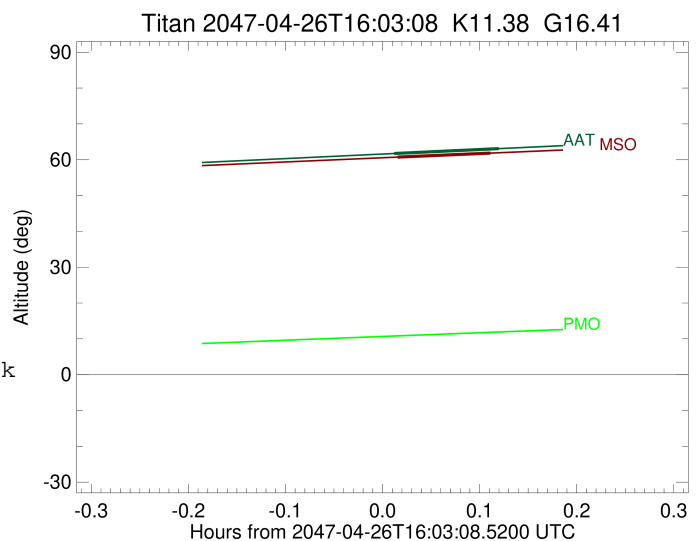

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target                : Titan
target radius (km)   : 2575.15
C/A epoch            : 2047-04-26T16:07:04.880
Event type          : Pgt
: Titan occs: geocentric, topocentric
: Not a ringed target
Observer code       : AAT
Location            : Siding Spring (AAT)
Latitude (deg)      : -31.27703
E. Longitude (deg)  : 149.06608
Altitude (km)       : 1.164
Gaia source ID      : 4090521668728373376
2Mass ID (if available) : 18162973-2218334
ICRS Star Coord at Epoch: 18h 16m 29.73117s -22:18:33.56503s
RUWE (>1.4 is poor) : 1.04
K magnitude          : 11.385
G magnitude          : 16.408
RP magnitude         : 15.017
BP magnitude         : 17.923
DUPflag             : 0
Distance (au)        : 9.471
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : -11.51
Sun-Target sep (deg) : 121.88
Sun-Moon sep (deg)  : 137.90
B (ring opening deg) : 26.00
PA of pole (deg)    : 5.96
Pole direction: RA (deg): 39.48270
Dec (deg): 83.42790
C/A sky separation (") : 0.163
C/A sky separation (km) : 1120.3
NAIF SPICE kernels  : RAJobs_U111+rgf16.spk
URKALLv1.spk
naif0012.tls
nep097.bsp
nep101.bsp
sat4401.bsp
de440.bsp
earth_720101_070426.bpc
jup365.bsp
urall6.bsp
IAU_SATURN_for_RINGFIT.tpc
pck00010.tpc
earth_200101_990628_predict.bpc
IAU_NEPTUNE_for_RINGFIT.tpc.BECAREFUL
uranus_ringframes_rfrench20220627_v1.tf
neptune_ringframes_rfrench20220702a_v1.tf
earth_flat_IAU.spk

```

x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Titan	I	2047-04-26T16:03:49.435	61.72	-56.94	2575.1	-29.82	-29.83
Titan	E	2047-04-26T16:10:20.256	63.09	-55.66	2575.1	-16.14	-16.14



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target                : Titan
target radius (km)   : 2575.15
C/A epoch            : 2047-04-26T16:06:56.380
Event type           : Pgt
: Titan occs: geocentric, topocentric
: Not a ringed target
Observer code        : MSO
Location             : Mt. Stromlo Observatory
Latitude (deg)       : -35.32000
E. Longitude (deg)   : 149.00833
Altitude (km)        : 0.770
Gaia source ID       : 4090521668728373376
2Mass ID (if available) : 18162973-2218334
ICRS Star Coord at Epoch: 18h 16m 29.73117s -22:18:33.56503s
RUWE (>1.4 is poor) : 1.04
K magnitude          : 11.385
G magnitude          : 16.408
RP magnitude         : 15.017
BP magnitude         : 17.923
DUPflag             : 0
Distance (au)        : 9.471
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : -11.51
Sun-Target sep (deg) : 121.88
Sun-Moon sep (deg)   : 137.90
B (ring opening deg) : 26.00
PA of pole (deg)     : 5.96
Pole direction: RA (deg): 39.48270
Dec (deg): 83.42790
C/A sky separation (") : 0.226
C/A sky separation (km) : 1553.4
NAIF SPICE kernels   : RAJobs_U111+rgf16.spk
URKALLv1.spk
naif0012.tls
nep097.bsp
nep101.bsp
sat4401.bsp
de440.bsp
earth_720101_070426.bpc
jup365.bsp
urall6.bsp
IAU_SATURN_for_RINGFIT.tpc
pck00010.tpc
earth_200101_990628_predict.bpc
IAU_NEPTUNE_for_RINGFIT.tpc.BECAREFUL
uranus_ringframes_rfrench20220627_v1.tf
neptune_ringframes_rfrench20220702a_v1.tf
earth_flat_IAU.spk

```

x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Titan	I	2047-04-26T16:04:03.021	60.72	-55.07	2575.1	-39.36	-39.38
Titan	E	2047-04-26T16:09:49.675	61.84	-54.04	2575.1	-26.12	-26.13

